

Amendments to the Specification:

Please replace the paragraphs on page 9, lines 15-20, with the following amended paragraphs:

~~Figure 6 shows a picture of an electrode board with every other electrode replaced with a loading pen.~~

~~Figure 7~~ Figure 6 shows the traces from both a conventional loading and a pen-injection/loading channel.

~~Figure 8~~ Figure 7 shows the electropherogram of a ROX labeled ladder, obtained by the above pen injection/sample separation method.

Please replace the paragraph on page 16, lines 20-23, with the following amended paragraph:

An electrode board was made to compare the pen loading/injection with conventional chip injection method. For the row of sample electrodes, every other electrode was replaced with a loading pen. ~~FIG. 6 shows a picture of such an electrode board.~~

Please replace the paragraph on page 17, lines 1-5, with the following amended paragraph:

~~Figure 7~~ Figure 6 shows the traces from a conventional loading and a pen-injection/loading channel. It can be seen that peak distribution is identical. The signal

intensity is surprisingly strong for only 50 nl of pen-injected sample, in comparison to 1.5 μ l sample in the regular sample well. The experiment proves that these pens can be used for loading and injecting samples on microchips.

Please replace the paragraph on page 17, lines 23-26, with the following amended paragraph:

~~Fig. 8~~ Figure 7 shows the electropherogram of a ROX labeled ladder, obtained by the above pen injection/sample separation method. The experiment proved that the spotter pen could be used for loading and injecting samples for the high density microchip of the vertical T design.